



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. Box 778
DOVER, DELAWARE 19903

JENNIFER COHAN
SECRETARY

**Advisory Council on Connected and Autonomous Vehicles
(Executive Order 14)
Subcommittee on Technology, Security, and Privacy**

Thursday, February 15, 2018
8:30am – 10:30am

DelDOT Administration Building, 800 Bay Road, Dover, DE
Farmington/Felton Conference Room

MINUTES

1. Welcome & Introductions

- a. The meeting commenced at 8:33 AM. E. Starkey indicated the objectives for this meeting were to finalize the subcommittee's project charter to submit to Secretary Cohan and to review the security working group's briefing report.
- b. The committee welcomed newly added members A. Cohen and J. Garrity.
- c. P. Barnes and A. Cohen joined the meeting via video conference from Newark, DE.

Present Voting Committee Members

Philip Barnes	University of Delaware (UD) Institute of Public Administration
Scott Clapper	Division of Motor Vehicles (DMV)
Aleine Cohen	Department of Justice
Jim Garrity	Diamond Technologies
Ken Grant	AAA Mid-Atlantic
Leslie Ledogar	Insurance Commissioner's Office
Li Wen Lin	DelDOT—Technology and Innovation
Scott O'Connor	Delaware Department of Technology and Information (DTI)
Elayne Starkey	Delaware Department of Technology and Information (DTI)
Sergeant Steve Yeich	Delaware Information and Analysis Center (DIAC)

Members Present by Proxy

Tarik Zerrad	Alliance of Automobile Manufacturers (Proxy for Renee Gibson)
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Absent Committee Members

Brian Pettyjohn	State Senate
Shari Shapiro	Uber



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Also Present

Erin Coombs Jacobs
Megan Rosica Jacobs

2. Approval Minutes from Last Meeting

- a. The committee reviewed the previous meeting minutes and had no revisions or comments. K. Grant made a motion to approve the minutes. Motion was seconded by L. Lin. Motion passed and the minutes were approved.

3. Review of Action Items from Last Meeting

- a. E. Starkey welcomed A. Cohen to the committee as a representative from the Department of Justice, and J. Garrity as a representative from Diamond Technologies. The committee now has a total of 13 members.
- b. An email distribution list was established cavtsp@lists.state.de.us
- c. A public collaboration tool was established
https://drive.google.com/drive/folders/1pvHBVnT4vOpg_jl8vxq9tj6OaH6xURQN

4. Finalize Scope, Charter, and Deliverables

- a. E. Starkey opened the discussion for comments and/or edits to the subcommittee's project charter draft.
 - i. A. Cohen recommended a modification to Key Assumptions numbered 6 and 8. After committee discussion the assumptions were changed to the following:
 1. (6) There is public uncertainty around this topic.
 2. (8) There is room for state and federal regulation and we recognize the appropriate balance must be struck.
 - ii. P. Barnes suggested adding an assumption regarding the data monitoring that will occur in autonomous vehicles. After committee discussion the following assumption was added:
 1. (9) There will be an enormous amount of data collection and it will likely setup tensions that will need to be addressed.
 - iii. The due date for subcommittee recommendations to the General Council was moved from August to July 2018. This resulted in the following schedule changes in the project charter:
 1. Finalization of the Subcommittee report will now occur during the July 19, 2018 meeting.



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2. A second June meeting was added in order to complete the final report and submit to the general council in time for the new July deadline. The date of this off-cycle meeting will be June 7, 2018.
3. The last two meetings will be kept on the schedule as tentative due to the earlier submission of the subcommittee report.
- iv. The report created by P. Barnes was added as a Possible Resource.
- b. K. Grant made a motion to approve the final Subcommittee Project Charter. J. Garrity seconded. The charter was approved by the committee. E. Starkey will make the approved edits to the project charter and submit to Secretary Cohan.

5. Security Workgroup Briefing (Scott O'Connor)

- a. S. O'Connor reviewed the Security workgroup's briefing, which recommends that the State of Delaware Information and Technology standards and policies be continually re-visited to ensure they are updated to address current, new, and accommodate known future technologies.
- b. The committee discussed various aspects of security in regards to autonomous vehicles:
 - i. Partnering with a third party organization (e.g. DelDOT's relationship with EZPass)
 - ii. Personal health information collection (e.g. blood pressure, glucose levels, heart rate, etc.)
 - iii. L. Ledogar gave a brief overview of a discussion on AV from an Insurance Conference she recently attended.
 1. Security discussions revolved around data that could be used for determining causation of crashes rather than the concern about collecting personal information.
 2. A clear definition of proprietary information will be needed.
 3. There are existing paradigms to be used in order to inform future decisions.
 - iv. A. Cohen indicated that many relevant privacy concerns will be addressed in the Supreme Court case, U.S. vs. Carpenter. This case raises the question of whether the government violates the Fourth Amendment to the United States Constitution by accessing an individual's historical cell phone locations records without a warrant.
 - v. The committee indicated their role is to make recommendations to policy makers so that issues in security can be addressed. E. Starkey suggested bringing in a subject matter expert to talk about policy that surrounds AV's. K. Grant volunteered to reach out to his contacts to help with this discussion. M. Rosica will research existing state legislation and policy regarding technology, security, and privacy.



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6. Individual Workgroup Time: Technology, Security, and Privacy

- a. E. Starkey gave a recap of the goal of the three workgroups: to focus on a specific subject area and discuss impacts and opportunities, as well as policies, related to the subject. The target outcome is 5-10 opportunities and potential pitfalls in each subject area.
- b. E. Starkey indicated that each workgroup's target outcomes should be formatted in a way that follows the project charter.
- c. The next meeting will include a report from the Technology workgroup; the meeting following will include a report from the Privacy workgroup.
- d. The committee divided into workgroups. A. Cohen joined the Privacy workgroup. J. Garrity joined the Security workgroup.

7. New Business

- a. K. Grant gave the committee a brief overview of AAA's autonomous shuttle in Las Vegas and the CES conference, with particular focus on aspects regarding Technology, Security, and Privacy.
 - i. Test AVs collect 1 Terabyte of data per day. In contrast the Hubble telescope collects 10 Terabytes per year. Given this enormous amount of data, ownership becomes a question, especially if consumers are leasing vehicles or using rideshare programs.
 - ii. Need to consider potential drops in traditional revenue streams (e.g. insurance premiums and law enforcement speeding tickets)
 - iii. FBI indicated that AV cybersecurity is a major concern, but not at the top of their priority list. Instead, they are focused on hacker activity with financial motivation.
 - iv. The Auto-ISAC allows automakers and manufacturers to freely share information as they find bugs/glitches in their systems. AAA is recommending all auto manufacturers get involved with Auto-ISAC to actively share information as they develop and implement AVs.
 - v. Different types of data: safety-related data will be required to share; other data may require the driver to opt-in
 - vi. Questions from committee:
 1. P. Barnes asked if blockchain is being used to create un-hackable architecture for vehicles. K. Grant has not heard about its use in vehicles but noted its value. The committee discussed blockchain and how this can be used to protect AV software in Delaware.
 2. P. Barnes asked K. Grant to share the survey data taken from riders on the AAA Autonomous Shuttle in Las Vegas. K. Grant will reach out to his counterparts in Las Vegas to share the survey data with the committee.



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- b. J. Garrity shared that his workgroup (security) plans to research varying data types to understand all data collection scenarios. He wondered how much research can be done before it needs to be made public.
 - i. The need for transparency in this committee was reiterated. E. Starkey stated that each workgroup can hold meetings outside of the monthly schedule. Assistance is available to comply with open meeting requirements.
 - ii. Assignments to research different data types were suggested to T. Zerrad and potentially a graduate student studying under P. Barnes.
- c. E. Starkey offered to contact Gartner for an analyst call regarding the report that was sent with meeting materials. E. Starkey will schedule a 15-20 minute call at a future meeting. The committee was asked to return with questions and comments about the Gartner report before the call.

8. Public Comment

- a. There were no comments from the public.

9. L. Ledogar made a motion to adjourn the meeting and L. Lin seconded. The motion passed and the meeting adjourned at 10:43 AM.

Action Item Summary:

1. E. Starkey will submit the final project charter to Secretary Cohan.
2. M. Rosica will research state legislation and policy specific to technology, security, and privacy regarding autonomous vehicles.
3. K. Grant will reach out to his counterparts in Las Vegas to share the survey data with the committee.
4. K. Grant will reach out to policy experts to have a committee discussion about autonomous vehicle policy moving forward.
5. T. Zerrad (and possibly P. Barnes's graduate student) will further research various data types and data collection scenarios.
6. E. Starkey will schedule a 15-20 minute call with a Gartner analyst during a future meeting.
7. All committee members will review the Gartner report and send in questions for the analyst.
8. The Technology workgroup will provide a briefing to the full subcommittee at the next meeting.